

28-37. (canceled)

REMARKS

Reconsideration of the claims in light of the following remarks is requested. Claims 18 and 20-27 are pending. Claim 18 is amended. Claims 1-17, 19, and 28-37 are canceled. Claim 26 is withdrawn from further consideration.

Applicants have not dedicated or abandoned any unclaimed subject matter and moreover have not acquiesced to any rejections made by the Patent Office. Applicants reserve the right to pursue prosecution of any presently excluded claim embodiments in future continuation and/or divisional applications.

Claim Amendment

Claim 18 is amended for technical clarity.

Claim Rejections Under 35 U.S.C. § 103

Claims 18, 20, 24 and 27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sigal *et al.* (U.S. 6,319,670) ("*Sigal*") in view of Meade *et al.* (U.S. 5,770,369) ("*Meade*") and Roberts *et al.* (U.S. 5,958,791) ("*Roberts*").

Claim 21 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sigal, in view of Meade, and Roberts, as applied to claims 18, 20, 24 and 27, and further in view of Bamdad *et al.* U.S. 5,620,850) ("*Bamdad*").

Claim 22 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sigal in view of Meade, and Roberts, as applied to claims 18, 20, 24, and 27, and further in view of Gerpheide *et al.* (U.S. 5,565,658) ("*Gerpheide*").

Claim 23 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sigal in view of Meade and Roberts as applied to claims 18, 20, 24, and 27, and further in view of Kayyem *et al.* (U.S. 6,096,273) ("*Kayyem*").

Claim 25 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Sigal in view of Meade and Roberts as applied to claims 18, 20, 24, and 27, and further in view of Kayyem.

The Applicants traverse each of the rejections based on the arguments presented in the previous response and herein.

1. Law of Obviousness

When rejecting claims under 35 U.S.C. §103, the Examiner bears the burden of establishing a *prima facie* case of obviousness. See, e.g., *In re Bell* 26 USPQ2d 1529 (Fed. Cir. 1993); M.P.E.P. S § 2142.

To establish a *prima facie* case, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine their teachings. M.P.E.P. §2142. However, the claimed combination cannot change the principle of operation of the primary reference or render the reference inoperable for its intended purpose. M.P.E.P. 2145. As explained in more detail in M.P.E.P. § 2143.01 VI:

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Therefore, if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the Examiner fails to establish a *prima facie* case because the teachings of the references are not sufficient to render the claims *prima facie* obvious.

2. The Examiner Has Failed to Establish A *Prima Facie* Case of Obviousness Because the Alleged Combinations Change the Principle of Operation of the Primary Reference, *Sigal*.

Claims 20-27 depend from claim 18, which recites: "a detector capable of detecting a voltage associated with electron transfer from said electron transfer moiety."

The primary reference relied upon by the Exam is *Sigal*, which as the Examiner concedes, does not disclose "a detector capable of detecting a voltage associated with electron transfer from said electron transfer moiety."

Further, as presented in the previous response, *Sigal* is directed to compositions and methods used to measure the presence of analyte by measuring electrochemiluminescence triggered by a voltage imposed on a working electrode. See col. 1, lines 15 – 19 and lines 48-49. It discloses that such electrochemiluminescence is measured with a photomultiplier tube (PMT). See col. 17, lines 26-27. It

also discloses compositions and methods for conducting electrochemiluminescence binding assays using microparticles that include electrically conductive material. See Abstract.

The Examiner relies on *Meade* to provide motivation to modify *Sigal* to use electronic detection. However, as noted, the principal of operation of *Sigal* is chemiluminescence-based, which is different from electronic detection as claimed for the invention. *Sigal* is based on optical detection of light and NOT a change in voltage. Therefore, replacing the optical detector in *Sigal* with the voltage detector of *Meade* totally changes the principal of operation of *Sigal*.

Because the proposed modification of *Sigal* would completely change the principle of operation of *Sigal*, the teachings of the references are not sufficient to render the claims *prima facie* obvious.

Assume, *arguendo*, the Examiner has established a *prima facie* case of obviousness, the *prima facie* case dissolves because Applicants have provided rebuttal evidence -replacing the optical detector in *Sigal* with the voltage detector of *Meade* totally changes the principal of operation of *Sigal*. As the Court stated in *In re Kumar*:

The *prima facie* case is a procedural tool, and requires that the examiner initially produce evidence sufficient to support a ruling of obviousness; thereafter the burden shifts to the applicant to come forward with evidence or argument in rebuttal. When rebuttal evidence is provided, the *prima facie* case dissolves, and the decision is made on the entirety of the evidence.

In re Kumar, 76 USPQ2d 1048, 1050 (Fed. Cir. 2005) (citations omitted).

As such, the Examiner has failed to make a *prima facie* case of obviousness, and even there is a *prima facie* case, it is rebutted, and the rejections, accordingly, are respectfully submitted to be improper and asked to be withdrawn.

CONCLUSION

Applicants respectfully submit that the claims are now in condition for allowance and early notification to that effect is respectfully requested. If the Examiner feels there are further unresolved issues, the Examiner is respectfully requested to phone the undersigned at (415) 781-1989.

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